Lindquistia bolitotheri gen. n., sp. n., a New Mite (Acari: Acarida) from a Coprophagous Beetle

By

S. MAHUNKA

Dr. E. E. Lindquist, Canada, sent me for study some deutonymph specimens of an acarid species, with the note that representatives of a probably new acarid genus were collected from the beetle *Bolitotherus cornutus* (Panz.).

My investigations substantiated Dr. Lindquist's opinion: we have to do with the representatives of a heretofore unique genus and species, rather isolated in the system, to be described as follows.

Lindquistia gen. n.

Hypopus. Body characteristically ellipsoid, also propodosoma large and elongated. Overlap field striated. Dorsal surface roughly sculptured. A characteristic heterotrichy: some dorsal hairs widened into a willow-leaf form. Sternocoxal region only with setae, no suctorial disk present near genital apparatus. Adhering plate small, with only disks D recognizable. A single pair of suctorial disks behind adhering plate, between it and posterior margin of body. All four pairs of legs short, joints stout, claws strongly developed, sessile. All tarsal hairs simple or spiniform, incrassate (legs III and IV), no lanceolate setae present. Tarsi with 11-10-9-9 hairs or solenidia, respectively, tibia of legs I and II with merely one hair each besides solenidia.

Type-species: Lindquistia bolitotheri sp. n.

Remarks: On the basis of especially the pair of suctorial disks between the adhering plate and the posterior margin of the body, the genus is easily distinguished from all other genera.

I dedicate the new genus with respect and in gratitude to Dr. E. E. LIND-QUIST, Ottawa, Canada.

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Lindquistia bolitotheri sp. n.

Dimensions: Length: $227-246 \mu$, breadt: $145-158 \mu$.

Habitus: Body a nearly regular ellipsis, uniform rounded anteriorly and posteriorly. Dorsal side with irregular foveolae of varying size, ventral side with very finely punctate epimeres.

Dorsal side (Fig. 1.): Propodosoma with 2 pairs of adjacent, median hairs shaped like willow-leaves. Ventrally (Fig. 3.) also with 2 pairs of setae: inner one considerably longer than the nearly adjacent outer pair. Hysterosoma with hairs c_1 , c_2 , d_1 and e_1 also shaped like willow-leaves, hair e_1 inclinate and slightly shorter than its widened mates. Marginal hairs essentially shorter, thinner, simple, h_1 extremely long.

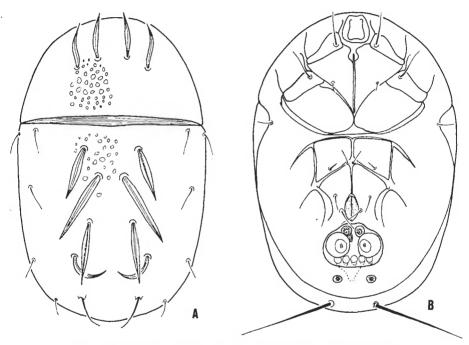


Fig. 1. Lindquistia bolitotheri sp. n. A: Dorsal side; B: ventral side

Ventral side (Fig. 2): Gnathosoma trapezoid. Apodemes well developed, forming a closed network. Anterior sternal apodeme long, raeching apodeme 2. Epimeres 1,3 and 4 with one pair of hairs each. Only one pair of setae originating beside genital opening, suctorial disk absent. Adhering plate small, far removed from posterior margin of body, with only disks D recognizable: D_1 small, D_2 very large, nearly filling adhering plate, D_3 and D_4 aligned on a transverse line, near each other and behind D_2 . One pair of isolated suctorial disks between adhering plate and posterior margin of body.

Legs: Solenidium φ_1 on tibia of leg I (Fig. 4.) extremely long, solenidia ω_1 and ω_2 of equal length, also ε long. Solenidium φ_1 of leg II (Fig. 5.) much shorter, obtuse. Only hair l' present on tibia of legs I and II. Solenidium φ_1 on tibia of

leg III extremely long, thin, that of leg IV minute. Tarsi of legs III and IV (Fig. 6-7) with two pairs each of spiniform, incrassate setae.

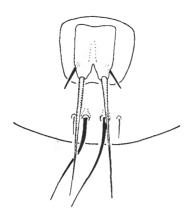


Fig. 2. Lindquistia bolitotheri sp. n. Propodosoma

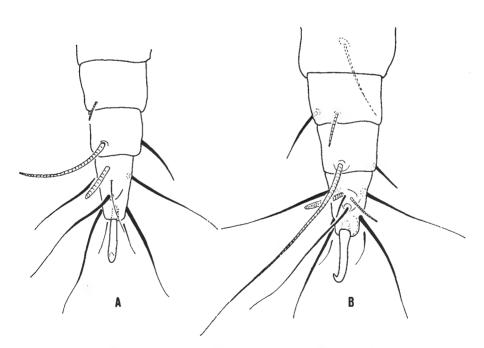


Fig. 3. Lindquistia bolitotheri sp. n. A: leg I; B: leg II

Type-material: Holotype and 5 paratypes. Holotype and 4 paratypes deposited in the Canadian National Collection, one paratype (A-563-74) in the Hungarian Natural History Museum. Locality: "Lamberton, N. C., 25. II. 53, from, *Bolitotherus cornutus* (PANZ.); coll. M. et A. HOWDEN."

On the basis of characteristics given in the generic description, the new species is easily separable from all known forms.

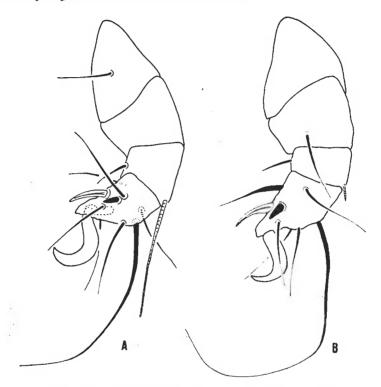


Fig. 4. Lindquistia bolitotheri sp. n. A: leg 111; B: leg 1V

ZUSAMMENFASSUNG

Lindquistia bolitotheri gen. n., sp. n., eine neue Milbenart (Acari: Acarida)

Der Verfasser beschreibt aus kanadanischen Exemplaren des Käfers Bolitotherus cornutus (PANZ.) eine neue Milbenart, die zugleich in eine neue Gattung gehört. Die Gattung Lindquistia gen. n. unterscheidet sich hauptsächlich durch die suktorischen Scheiben vor dem Körperhinterende von den verwandten Gattungen.